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Claims

1. A compound of formula (I):

OF Iornidia (i):

$$(R^{1})_{m} \xrightarrow{W} A \qquad \qquad (R^{2})_{n} \qquad \qquad (R^{2})_{n} \qquad \qquad (I)$$

5 wherein

R¹ represents C₁₋₃ alkyl or halogen;

 R^2 represents C_{1-3} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, halogen, C_{1-3} alkoxy, amino, cyano or n hydroxy;

m represents an integer from 0 to 4;

10 n represents an integer from 0 to 2;

A-B represents -NR5-SO2- or -NR5-CO-;

 R^5 represents hydrogen, C_{1-6} alkyl, C_{3-6} alkenyl, C_{3-6} alkynyl, C_{3-10} cycloalkyl, $-C_{0-6}$ alkyl-heterocyclyl, $-C_{3-10}$ cycloalkyl-aryl or $-C_{3-10}$ cycloalkyl-heteroaryl;

-W- represents -CH₂-, -(CH₂)₂-, -(CH₂)₃-, -C(H)=C(H)- or -CH₂-C(H)=C(H)-; X-Y-Z represents -C=CR⁸-NR⁹-;

 R^8 represents hydrogen, C_{1-8} alkyl or C_{3-10} cycloalkyl;

 R^9 represents hydrogen, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-10} cycloalkyl, $-C_{0-6}$ alkyl-aryl, $-C_{0-6}$ alkyl-heterocyclyl, $-C_{3-10}$ cycloalkyl-aryl, $-C_{3-10}$ cycloalkyl-heteroaryl, $-C_{3-10}$ cycloalkyl-heteroaryl

COOR^{12a}, -OR^{12a}, -CONR^{12a}R^{13a}, -SO₂NR^{12a}R^{13a}, -COC₁₋₆ alkyl, -COC₃₋₁₀ cycloalkyl, -CO-aryl, -CO-heteroaryl, -COC₁₋₆ alkyl-aryl, -COC₁₋₆ alkyl-heteroaryl, -COC₃₋₁₀ cycloalkyl-aryl, -SO₂C₁₋₆ alkyl, -SO₂C₃₋₁₀ cycloalkyl, -SO₂aryl, -SO₂heteroaryl, -SO₂C₁₋₆ alkyl-aryl, -SO₂C₁₋₆ alkyl-heteroaryl, -SO₂C₃₋₁₀ cycloalkyl-aryl or -SO₂C₃₋₁₀ cycloalkyl-heteroaryl (wherein R^{12a} and R^{13a} independently represent

25 hydrogen, C₁₋₆ alkyl or C₃₋₁₀ cycloalkyl);

 R^3 represents C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkyl- C_{1-6} alkyl- C_{3-10} cycloalkyl, $-C_{0-6}$ alkyl-heterocyclyl;

 R^4 represents hydrogen, $C_{1\text{--}10}$ alkyl, $C_{2\text{--}10}$ alkenyl, $C_{3\text{--}10}$ alkynyl, $-C_{3\text{--}10}$ cycloalkyl, $-C_{3\text{--}10}$ cycloalkyl, $-C_{0\text{--}8}$ alkyl-heteroaryl, $-C_{0\text{--}8}$ alkyl-heteroaryl, $-C_{0\text{--}8}$ alkyl-heteroaryl, $-C_{3\text{--}10}$ cycloalkyl-heterocyclyl, cycloalkyl-heterocyclyl, $-C_{3\text{--}10}$ cycloalkyl-heterocyclyl,

cycloalkyl, -C₃₋₁₀ cycloalkyl-aryl, -C₃₋₁₀ cycloalkyl-neteroaryl, -C₃₋₁₀ cycloalkyl-neterocyclyl-aryl, -C₃₋₁₀ cycloalkyl-C₁₋₆ alkyl-aryl, -heterocyclyl-aryl, -C₁₋₆ alkyl-aryl-heteroaryl, -C(R^aR^b)-CONH-C₁₋₆ alkyl, -C(R^aR^b)-CONH-C₃₋₁₀ cycloalkyl, -C₂₋₆ alkyl-S-C₁₋₆ alkyl, -C₂₋₆ alkyl-NR^cR^d, -C(R^aR^b)-C₁₋₆ alkyl, -C(R^aR^b)-C₀₋₆ alkyl-aryl, -C(R^aR^b)-C₀₋₆ alkyl-heterocyclyl, -C₂₋₆ alkyl-O-C₀₋₆ alkyl-aryl, -C₂₋₆ alkyl-O-C₀₋₆ alkyl-

35 heteroaryl or -C₂₋₆ alkyl-O-C₀₋₆ alkyl-heterocyclyl;

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R^a and R^b independently represent hydrogen, C₁₋₆ alkyl or R^a and R^b together with the carbon atom to which they are attached may form a C₃₋₁₀ cycloalkyl or heterocyclyl group;

R^c and R^d independently represent hydrogen, C₁₋₆ alkyl, C₃₋₁₀ cycloalkyl or R^c and R^d together with the nitrogen atom to which they are attached may form a nitrogen containing heterocyclyl group;

wherein said alkyl, alkenyl, alkynyl and cycloalkyl groups may be optionally substituted by one or more (e.g. 1 to 6) halogen, C₁₋₆ alkyl, C₂₋₆ alkynyl, C₂₋₆ alkenyl, haloC₁₋₆ alkyl, C₁₋₆ alkoxy, haloC₁₋₆ alkoxy, amino, cyano, hydroxy, –COOR²², -S-C₁₋₆ alkyl or -C₁₋₆ alkyl-

10 NR^6R^7 (wherein R^6 and R^7 independently represent hydrogen, C_{1-6} alkyl or C_{3-10} cycloalkyl) groups; and

wherein said aryl, heteroaryl or heterocyclyl groups may be optionally substituted by one or more (e.g. 1 to 6) C_{1-6} alkyl, halogen, halo C_{1-6} alkyl, halo C_{1-6} alkoxy, oxo, hydroxy, C_{1-6} alkoxy, C_{2-6} alkynyl, C_{2-6} alkenyl, amino, cyano, nitro, -COOR²², -NR²²COR²³, -

CONR²²R²³, -SO₂NR²²R²³, -NR²²R²³, -C₁₋₆ alkyl-NR²²R²³, -C₁₋₆ alkyl-O-C₁₋₆ alkyl or -C₁₋₆ alkanoyl groups (wherein R²² and R²³ independently represent hydrogen, C₁₋₆ alkyl or C₃₋₁₀ cycloalkyl);

or a pharmaceutically acceptable salt or solvate thereof.

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- 20 2. A compound according to claim 1 which is a compound of formula E1-E90 or a pharmaceutically acceptable salt thereof.
 - 3. A pharmaceutical composition comprising a compound of formula (I) as defined in claim 1 or claim 2 or a pharmaceutically acceptable salt or solvate thereof in admixture with one or more pharmaceutically acceptable diluents or carriers.
 - 4. A compound of formula (I) as defined in claim 1 or claim 2 or a pharmaceutically acceptable salt or solvate thereof for use as a pharmaceutical.
- 5. Use of a compound of formula (I) as defined in claim 1 or claim 2 or a pharmaceutically acceptable salt or solvate thereof in the treatment of diseases characterised by elevated β-amyloid levels or β-amyloid deposits.
- Use of a compound of formula (I) as defined in claim 1 or claim 2 or a
 pharmaceutically acceptable salt or solvate thereof in the manufacture of a medicament for the treatment of diseases characterised by elevated β-amyloid levels or β-amyloid deposits.
- 7. A method of treatment or prophylaxis of diseases characterised by elevated β-40 amyloid levels or β-amyloid deposits which comprises administering to a patient an effective amount of a compound of formula (I) as defined in claim 1 or claim 2 or a pharmaceutically acceptable salt or solvate thereof.

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8. A pharmaceutical composition comprising a compound of formula (I) as defined in claim 1 or claim 2 or a pharmaceutically acceptable salt or solvate thereof for use in the treatment of diseases characterised by elevated β -amyloid levels or β -amyloid deposits.

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